

Con. 3508-09.

(REVISED COURSE)

VR-3864

(3 Hours)

[ Total Marks : 100

Lib

30-05-09

3 p.m. to 6 p.m.

- N.B. :** (1) Question No. 1 is compulsory.  
(2) Attempt any four out of the remaining questions.

1. (a) Compare centralized and Distributed operating systems. 5  
(b) What is sliding window protocol ? Where is it applicable ? 5  
(c) What are recent developments in networks ? List at least two with an application area for it. 5  
(d) Explain general principals of congestion control. 5
2. (a) Explain OSI model and compare it with TCP/IP reference model. 10  
(b) Compare circuit switching and packet switching. 5  
(c) What are different classes of IP addresses ? Give the format of each class. 5
3. (a) With an example explain different methods of frame forming. 10  
(b) Explain CSMA/CD 10
4. (a) What are different types of routing ? With an example explain Dijkstra's routing algorithm. 12  
(b) For the address 132.7.21.84 find the type of network and network address. 4  
(c) A router inside an organisation receives the same packet with a destination address 190.240.34.95. If the subnet mask is 19 (First 19 bits are 1s and following bits are 0s). Find subnet address. 4
5. (a) What is distributed computing ? What are the advantages and disadvantages of distributed computing ? 5  
(b) Explain Remote procedure call. 10  
(c) What are the advantages of fiber optics as communication medium ? 5
6. Write short notes on :— 20  
(a) SNMP  
(b) ALOHA  
(c) OSPF  
(d) ARP, RARP
7. (a) What is interprocess communication ? Explain its role in network based communication system. 7  
(b) Explain TCP connection management and TCP transmission policy. 6  
(c) What is a hub ? Explain different types of hubs. How is a hub different from switch ? 7